ATTACHMENT A
Remarks

Claims 1, 3, 4, 6, 7, 9, 10, 14, 15, 20-22, 24, 25 and 29-35 stand pending in the present application. By this Amendment, Applicants have amended claims 7, 9, 10, 14, 15, 20, 21, 22, 24, 25, 27, 29, 30, 33, 34 and 35 and canceled claims 27, 31 and 32. Applicants respectfully submit that the present application is in condition for allowance based on the discussion which follows.

The specification was objected to for failing to include all SEQ ID numbers for all sequences listed in accordance with 37 C.F.R. § 1.821(a)(1) and (a)(2), for failing to properly indicating trade names and for having a typographical error. By this Amendment, Applicants have submitted a substitute sequence listing which now includes the previously unidentified sequences. Further, the specification has been amended to reference the respective SEQ ID numbers in the substitute sequence listing. Further, trade names are now properly indicated in accordance with MPEP § 608.01(b). Finally, with regard to the specification, the spelling of "limbic" has been corrected on page 37, line 5.

Claims 9, 14, 15 and 20 were objected to for containing informalities. By this Amendment, Applicants respectfully submit that the amendment to the claims obviates the objections.

Claims 10, 14, 15, 20 and 33-35 were rejected under 35 U.S.C. § 112, first paragraph. Specifically, these claims were rejected on the ground that only derivatives binding anti-CV2 antibodies could be used to carry out the present invention. Further, it was alleged that it would require undue burden for one of ordinary skill in the art to

identify which derivatives of a polypeptide of SEQ ID No. 8 could bind anti-CV2 antibodies. However, the Examiner acknowledges that polypeptides comprising sequence SEQ ID No. 8 and fragments thereof that bind anti-CV2 antibodies could be readily made and used. Accordingly, claims 10, 14, 15, 20 and 33-35 have been amended by removing reference to derivatives of SEQ ID No. 8.

Specifically, with regard to claims 30-35, the term "an antigenic portion of the polypeptide" has been replaced by "a fragment of a polypeptide comprising amino acid sequence of SEQ ID No. 8 and that binds to anti-CV2 antibodies".

Based on the foregoing Applicants respectfully submit that the amendment to these claims obviate this 35 U.S.C. § 112, first paragraph rejection thereto.

Claims 9, 10, 14, 15, 20-22, 24, 25, 29 and 33-35 were rejected under 35 U.S.C. § 112, first paragraph, alleging that the specification was not enabling for diagnosing any PNS and/or any tumor. In making this allegation, the Examiner relies in particular on articles Rogemond et al (2000) and Antoine et al (1999) that allegedly teach that not all carcinoma associated with PNS are characterized by the presence of anti-CV2 antibodies.

Applicants respectfully submit that the amendment to claims 9, 14, 15 and 20 discussed above with regard to the claim objections render this rejection moot. Further, Applicants have amended claims 24, 25 and 29 consistent with the amendment to claims 9, 14, 15 and 20.

With regard to the rejection of claims 33-35, Applicants respectfully submit that the rejection to these claims is inappropriate since these claims relate to the detection of antibodies and not to the diagnosis of PNS or tumors.

Finally with regard to the rejection of claim 7, claim 7 has been amended to now recite an isolated host cell thereby obviating the rejection to claim 7 under 35 U.S.C. § 112, first paragraph.

Based on the foregoing discussion, Applicants respectfully request that all rejections to the claims under 35 U.S.C. § 112, first paragraph, be withdrawn.

Claims 14, 15, 27 and 34 were rejected under 35 U.S.C. § 112, second paragraph.

Applicants respectfully submit that the amendment to these claims obviate the rejection under 35 U.S.C. § 112, second paragraph.

Specifically with regard to the rejection to claim 27 under 35 U.S.C. § 112, second paragraph, by this Amendment, Applicants have amended claim 25 to recite "a polypeptide comprising amino acid sequence SEQ ID No. 8 or a fragment thereof that binds to anti-CV2 antibodies". Subsequently, Applicants have canceled claim 27 thereby rendering the rejection to claim 27 now moot.

Claims 1, 9, 10, 14, 20, 21, 24, 25 and 29-32 were rejected under 35 U.S.C. § 102(b) as being anticipated by Honnorat et al (hereinafter "Honnorat 1996") as evidenced by Honnorat et al (hereinafter "Honnorat 1999"). The Examiner alleges that Honnorat 1996 describes a composition comprising a purified 66 kDa polypeptide that binds anti-CV2 antibodies.

Applicants respectfully submit that the Examiner's allegation is without merit.

Nowhere does Honnorat 1996 disclose a purified 66 kDa polypeptide. Honnorat 1996 discloses actually immunoblots performed either on serum samples (Figure 7) or on an enriched fraction of serum (Figures 8 and 9). It can be drawn from

the immunoblots that the 66 kDa band is not the only one band detected, which proves that the corresponding 66 kDa polypeptide is not purified.

This assertion is further supported by Honnorat 1996 as they point out that "further work is needed to purify the 66 kDa protein" (page 277, right column, end of first paragraph).

Furthermore, it looks like the Examiner has cited Honnorat 1999 apparently in an attempt to show that a characteristic of what is disclosed in the primary cited reference, Honnorat 1996, is inherent. Although the citing of a secondary reference for this purpose is ordinarily permissible (see MPEP, § 2131.01), the citing of this particular secondary reference is not permissible. Honnorat 1999, published after the filing date of the application, describes the work of the inventors, and to a large extent shares the content of the application. Thus, the Examiner is, in effect, using the teaching of the application itself to support an allegation that a teaching in Honnorat 1996 shows an inherent characteristic.

With regard to the rejection of claim 30, the Examiner alleges that Honnorat 1996 discloses fixed section of brain tissue comprising cells that express a 66 kDa polypeptide. However, Honnorat 1996 does not disclose a fixed section of brain tissue wherein cells express a fragment of the 66 kDa polypeptide. Accordingly, claim 30 (currently amended) is not taught or suggested by Honnorat 1996.

Claims 10, 15 and 33-35 were rejected as being obvious by Hamajima et al (hereinafter "Hamajima") in view of Thompson et al (hereinafter "Thompson"). Applicants respectfully submit that the amendment to the claims, namely canceling

reciting derivatives of SEQ ID No. 8 overcomes the 35 U.S.C. § 103 rejection to these claims.

In part 27 of the Office Action, claims 3, 6, 7, 15, 22, 27 and 33-35 were alleged to be unpatentable over Honnorat 1996 as evidenced by Honnorat 1999 in view of U.S. Patent No. 6,455,271. However, the Examiner gives no explanation as to how it would have been obvious for one of ordinary skill in the art to carry out the isolation of the polypeptide of SEQ ID No. 8 and the cloning of a cDNA encoding the polypeptide. This prima facie obviousness rejection entirely relies on the assumption that the polypeptide of sequences SEQ ID No. 8 was disclosed by Honnorat 1996, which is ill-founded. As previously submitted, there fails to be any motivation, suggestion or incentive given by Honnorat 1996 to achieve purification of the 66 kDa protein render its isolation nor its cloning obvious.

Moreover, consistent with the holding in the case In re Bell, 991 F.2d 781, 26 USPQ2d 1529 (Fed. Cir. 1993), the rejection of claims 3, 6 and 7 is inappropriate. Knowing the structure of a protein does not necessarily make the gene encoding the sequence obvious due to the degeneracy of the genetic code (see In re Bell, 26 USPQ2d at 1531).

Based on the foregoing, Applicants respectfully request that the Examiner withdraw the 35 U.S.C. § 103 rejection to the claims.

In view of the foregoing, Applicants respectfully submit that the present application is now in condition for allowance.

END REMARKS